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January 5, 1994

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, N.W. -- Room 222
Washington, D.C. 20554

Re: Notice of Ex Parte Contact
GEN Docket No. 90-314

Dear Mr. Caton:

Wiley, Rein & Fielding hereby files an original and one copy of a notification of an ex parte contact in GEN Docket No. 90-314. Copies of the attached summary of the comments on petitions for reconsideration in GEN docket No. 90-314 were distributed to a number of members of the Federal Communications Commission staff.

If any questions should arise concerning this notification, please contact R. Michael Senkowski at (202) 429-7249.

Respectfully submitted,

By:


Robert J. Butler

RJB/cjs
Enclosure

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

WILEY, REIN & FIELDING

**SUMMARY OF COMMENTS ON PETITIONS FOR
RECONSIDERATION OF THE SECOND REPORT AND
ORDER ON PERSONAL COMMUNICATIONS SERVICES**

**GEN Docket 90-314
ET Docket 92-100**

**R. Michael Senkowski
Robert J. Butler
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January 5, 1994

FOREWORD

On December 30, 1993, and January 3, 1994, approximately 40 comments were filed in response to petitions seeking clarification, modification or reconsideration of the FCC's Second Report and Order on new 2 GHz Personal Communications Services ("PCS"). These comments are summarized herein. The summaries are divided into two sections on licensed 2 GHz PCS (TAB A) and unlicensed 2 GHz PCS systems (TAB B). The comments within each tab are arranged alphabetically by company or organization name.

We have done our best to represent each commenter's positions accurately on a range of issues within one or two pages and in a consistent format. Due to space and time constraints, however, many supporting arguments have been truncated and rephrased to conserve space. Accordingly, in all cases, it is highly advisable to review the actual commenter's text. All summaries have page references to the actual commenter's text.

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A

**ADVANCED MOBILECOMM TECHNOLOGIES, INC.
DIGITAL SPREAD SPECTRUM TECHNOLOGIES, INC.**

Interest: AMT is an affiliate of Advanced MobileComm, Inc., a large provider of land mobile services. DSST is a subsidiary of CYLINK, a leader in design, development and manufacture of Part 15 spread spectrum equipment.

Band Plan:

- AMT and DSST believe that the Commission's allocation decisions reflect a reasoned balancing of the regulatory, policy, and technical considerations raised in the PCS proceeding. Consequently, they do not favor a restructuring of the allocation decisions on reconsideration. (1-2)
- AMT and DSST disagree with those parties that suggest that the allocation of a PCS license involving more spectrum than 10 or 20 MHz will disserve the public interest, nor do they agree with the contention that the 10 MHz allocation may become "orphaned." (3)
- With regard to large allocations, AMT and DSST argue that the record reflects that "big" licenses will enable the provision of service from the inception with system capacity comparable to cellular. Similarly, the 10 MHz allocation serves a valuable role by accommodating the needs of specialized services and niche applications. (3-4)
- AMT and DSST also contend that the 10 MHz allocation will spur the development of spectrally efficient technologies as licensees of 10 MHz systems seek to capture larger markets and greater market shares. (5)
- AMT and DSST suggest that some of the concerns raised in the petitions for reconsideration with regard to the allocation decisions may be addressed by incorporating sufficient flexibility into both the auction process and the service rules to permit licensees to respond rapidly to market conditions. Accordingly, AMT and DSST favor the adoption of service rules that would enable licensees to partition or lease system capacity either on a geographic or spectrum basis upon notice to the Commission. (6)

ALCATEL NETWORK SYSTEMS, INC.

Interest: Manufacturer of microwave equipment and participant in TIA interference standards activities (e.g., Bulletin 10-F).

Power Limits:

- Does not oppose higher power limits, but notes that corresponding changes must be made to the coordination table in Section 94.233(a) to ensure non-interference with microwave users. (4-5)

Interference Standards:

- Notes support in favor of TSB10-F as sole methodology for determining interference, and urges adoption of consensus changes to Appendix D calculations until TSB10-F is finalized. (1-3)
- Agrees with Bell Atlantic that signal margin calculations must be refined, as they will be in TSB10-F, but disagrees that the FCC or anybody else should define what an "excess" margin is. (3)
- Supports Bell Atlantic's suggested policy of requiring OFS operators to upgrade their facilities if the PCS operator pays the cost of such an upgrade, but only if the new facilities are comparable to or better than the existing facilities. (4)

AMERICAN PERSONAL COMMUNICATIONS

Interest: PCS proponent

Band Plan:

- Opposes proposals to allocate smaller PCS spectrum blocks. 30 MHz blocks are necessary in order to allow operation in spectrum occupied by microwave users, to support a level of traffic necessary to compete effectively with the local exchange monopoly, and to permit high speed wireless data and multi-media operations. The arguments for smaller PCS blocks ignore the experiences of cellular and ESMR companies. (10-15)
- Opposes proposal of UTC and APMCO to carve out spectrum for private and internal use of utilities and public-safety organizations. Private organizations will have full access to unlicensed PCS and commercial PCS systems (as well as other wireless technologies). The spectrum available for licensed PCS services has already been limited by grandfathering of existing microwave users, allocation for unlicensed devices, and a reservation of spectrum of mobile satellite services; it should not be further eroded for private systems. (19-20)
- APC urges the FCC to adopt a partial set-aside of the 38 GHz frequencies for PCS backhaul. Recent applications propose to consume all of the remaining 38 GHz channels in a number of substantial markets. (23-24)

Service Areas:

- Opposes proposals to reconsider MTA licensing areas. MTA-sized markets are necessary to avoid the expensive, wasteful, and time consuming process of aggregating small license areas into realistic service areas. These sized markets are also necessary to permit competition with entrenched wide-area cellular companies. (3-9)

Power Limits:

- As proposed in the petitions of APC and others, the FCC should increase the power limitation for PCS to 1000 watts ERP. The current 100 watt EIRP limit would dramatically increase the number of PCS base stations required to meet the construction requirements and unnecessarily raise the cost of PCS to the public. (20-21)

Interference Standards:

- As APC proposed in its petition, the FCC should modify the coordination distances of Section 99.233(a) and the power and antenna height limits of Section 99.231(a). (22)
- APC supports TIA's proposal regarding PCS-OFS interference calculation procedures. (22)
- APC supports Telocator's proposed changes to Section 99.234(a) regarding PCS emission limitations. (23)

CAI Standards:

- Opposes Motorola's and TIA's proposal to delay PCS implementation until PCS equipment has been approved by ANSI-accredited standards bodies. Adopting such a proposal would delay PCS and entrench its competitors' market dominance. Further, numerous services have flourished without being standardized by any ANSI-accredited body. (15-17)

Application Filing Requirements:

- As APC proposed in its petition, the FCC should modify the position location accuracy requirement of Section 99.53(e) to specify accuracy to the nearest second. (22)
- APC supports Telocator's proposal to streamline the PCS filing process by instituting electronic filing procedures. (22-23)
- APC opposes UTC's proposal to adopt cellular licensing procedures for PCS applicants. (23)

RF Exposure:

- APC supports Telocator's proposal to conform the language of Section 99.52 to the discussion in the Second Report and Order. (23)

Other:

- Opposes proposal of the Texas Advisory Commission on State Emergency Communications to delay the provision of PCS until standards for E911 access are adopted. While standards are being developed, the deployment of PCS services will enhance, rather than compromise, the safety of the American public. (18-19)

AMERICAN PETROLEUM INSTITUTE

Interest: Trade association for companies involved in the petroleum and natural gas industries.

Band Plan:

- In response to AMSC and TRW's requests for a reallocation of additional 2 GHz spectrum to the mobile satellite service, API states that an adequate spectrum reserve exists for the development of mobile satellite offerings and that no further consideration should be given to another allocation at this time. (8)
- Believes that the requests of those petitioners seeking a spectrum allocation in which to establish private PCS systems have merit and should be given serious consideration. Because the reliability demands of large industrial, public safety and other users could be met by PCS systems, API believes that a spectrum allocation for private PCS is needed and suggests that spectrum from the federal government 2 GHz band could be the appropriate source. (9)

CAI Standards:

- API supports TIA's request that the Commission establish uniform common air interface standards for PCS. (9)

Interference Standards:

- API supports adoption of a single interference standard, which will diminish interference potential to POFS operations during the transition period and provide a level of certainty for PCS system design. (3)
- API supports TIA's forthcoming Bulletin 10-F standard for PCS/POFS interference analysis and agrees with TIA that the FCC's proposed method set forth in Appendix D of the Report and Order should be used only as an interim measure. (3)
- API supports the adoption of a requirement that deployment of PCS facilities in a shared microwave environment occur only subsequent to coordination by a third party. (3)
- To facilitate coordination, the Commission should require submission of an independent interference analysis with each PCS application. (3)

Power Limits:

- API does not object to any particular PCS base station power limitation proposal, as long as clear PCS/POFS interference criteria exist and independent coordination is required. Nevertheless, higher base station transmit power levels could increase the likelihood of interference to POFS operations, necessitating strict interference avoidance criteria. (5)
- API questions those commenters that argue that higher base station transmit powers are necessary to permit PCS to compete with cellular and SMRs. API does not believe these claims are relevant to this proceeding. (5)
- Also in this vein, API is concerned with MCI's request for authorization to deploy higher powered "vehicular mobile" and "temporary base" facilities. The vehicular mobile service configurations proposed by MCI were not analyzed in this proceeding, and authorizations to deploy higher power levels will increase the potential for interference to POFS operations. With regard to higher power temporary base facilities, API contends that in a shared spectrum environment, it is inconsistent to allow the licensing of high powered PCS base stations at temporary locations unless stringent coordination and notification procedures are required. (6)

APPLE COMPUTER, INC.

Interest: Computer manufacturer and Data-PCS proponent.

Band Plan:

- Opposes suggestions by APCO and UTC for spectrum for "private PCS" and does not believe any unlicensed spectrum should be reallocated. (8-9)

Interference Standards:

- Supports Bell Atlantic proposal to require microwave operators to upgrade their facilities if the PCS operator agrees to pay and the upgrade is at least as reliable as the original link; the policy should also be extended to retuning microwave facilities and to the unlicensed bands. (7)

Power Limits:

- The FCC should limit licensed PCS base station and mobile unit power levels to no more than 2 Watts in the 5 MHz adjacent to the unlicensed bands, mandate an uplink/downlink scheme, and control the emission masks for transmitters operating in spectrum adjacent to the unlicensed band. (4-5)

ASSOCIATION OF AMERICAN RAILROADS

Interest: Trade association of railroad companies and frequency coordinator for land mobile radio services.

Power Limits:

- AAR does not object to proposals to increase PCS base station power limits, as long as existing protections for microwave users are maintained. (5-7)

Interference Standards:

- Supports petitions seeking a single methodology for determining PCS-microwave interference. (2-4)
- Supports UTC proposal for prior coordination of PCS systems in the 2 GHz band to ensure the integrity of existing links. (4)
- Supports Bell Atlantic's suggestion that the FCC require microwave users to upgrade their facilities if the PCS operator pays the full costs of the upgrade and the facilities are equivalent to or better than the existing facilities. (4-5)
- Supports Bell Atlantic's suggestion that tax certificates be used for microwave operations forced to relocate. (5)
- Does not object to proposals to allow PCS licensees to subdivide licenses geographically or by frequency as long as all relocation commitments entered into by the original licensee are kept by subsidiary licensees. (8-9)

ASSOCIATION OF INDEPENDENT DESIGNATED ENTITIES

Interest: Association of persons and companies likely to be classified as "Designated Entities" under Section 309(j) of the Communications Act.

Service Areas:

- The Commission should adopt a non-proprietary market definition system; since even the threat of litigation over proprietary rights could have adverse effects, AIDE recommends changes to place the PCS market definitions in the public domain, including use of BPAs and MPAs (basic and major PCS areas). (iii, 9-15)
- Supports proposals to allow voluntary partitioning of PCS markets by bidding consortia, full-market settlements, or post-grant modification applications. (5)

Cellular Eligibility:

- Cellular carriers should be permitted to make minority investments in bidding consortia controlled by designated entities. (ii-iii, 7-9)
- Opposes changes to the rules regarding substantial in-market cross-ownership of PCS systems by cellular carriers, and favors expansion of such rules to ESMR licensees and other likely PCS competitors. (iv, 18-21)

Performance Requirements:

- Since PCS providers will cover population centers in any event, build out requirements should encourage the rapid development nationwide service by requiring coverage of 10 percent of the area in 1 year, 20 percent in two years, and 40 percent within 4 years. (ii, 2-4)
- Each partition in a market should be subject to separate and individual build-out requirements. (ii)
- License revocation for failure to meet performance requirements is excessively draconian and the Commission should instead utilize cellular-style unserved area licensing for territories uncovered after 10 years. (ii, 5-7)

Application Filing Requirements:

- Opposes the changes proposed by U S West as outside the scope of this proceeding. (iii, 15-18)

BELL ATLANTIC PERSONAL COMMUNICATIONS, INC.

Interest: Regional Bell Operating Company PCS affiliate.

Band Plan:

- There is no technical or economic justification in the record for fragmenting spectrum into seven uneven blocks; the FCC should instead allocate spectrum into 6 20 MHz licenses to assure a competitive, economic, efficient, and open PCS industry. (3-4)
- Opposes the petitions of Time Warner and PacBell for 40 MHz licenses, since 20 MHz licenses are sufficient for a PCS system and will allow aggregation. (4-5)
- Opposes the petitions of CTIA and NEXTEL for 10 MHz licenses, since 10 MHz does not appear to be sufficient for economically and technically viable PCS. (5-8)
- Opposes MSS petitioners; the FCC should reaffirm its decision to allocate 120 MHz to PCS and its balancing of MSS and PCS spectrum needs. (8-10)

Cellular Eligibility:

- Opposes cellular eligibility restrictions as unjustified and contrary to the public interest. (10)
- Opposes MCI petition to exclude the nine largest cellular companies as an attempt to use the regulatory process to eliminate potential competition. (11)
- Opposes Comcast petition to eliminate cellular restrictions for nonwirelines as an attempt to shield itself from competition. (12)

Power Limits:

- Agrees with petitioners seeking to eliminate overly restrictive power limits. (14)

CABLEVISION SYSTEMS CORPORATION

Interest: Cable television service provider.

Cellular Eligibility:

- The FCC should reject proposals to create a "designated entity" exception to the cellular eligibility rules as it would contravene the FCC's goals of fostering competition between PCS and cellular service. (5-7)
- The FCC should clarify that cellular carriers must divest their cellular interests no later than six months after issuance of a PCS license for the affected area. (7-8)
- The FCC should not adopt provisions, such as NYNEX's recommendation to incorporate a "sunset" provision, that would relax the eligibility and aggregation rules. (8-9)
- The FCC should not subsidize cellular entry into PCS with the issuance of tax certificates for voluntary divestitures of cellular interests. (10-13)

CELLULAR INFORMATION SYSTEMS, INC.

Interest: Cellular operator

Cellular Eligibility:

- Opposes proposals of NYNEX and BellSouth to allow RBOC- and LEC-affiliated cellular carriers to acquire more than 10 MHz of PCS spectrum in their landline service areas. Such proposals could negatively impact independent cellular carriers by providing RBOC- and LEC-affiliated carriers with enough additional spectrum that they would be able to exclude independents from participating in regional cellular service offerings. (3-6)
 - Believes the limit on cellular eligibility should not be imposed where the carrier is not affiliated with the LEC and intends to combine PCS and cellular systems in order to compete with the landline monopoly. (5, n.4)
- Even under the current rules, there may be areas in which the RBOC- or LEC-affiliated carrier could be eligible for up to 40 MHz of PCS spectrum within their affiliated landline franchise (due to population distribution). To prevent anticompetitive exclusionary conduct, the FCC should incorporate into its reconsideration order the following conditions on the integration of PCS systems into other telecommunications systems (6-8):
 - If a PCS system is integrated with cellular systems, a cellular licensee is obligated to maintain existing relationships with other cellular licensees on the same frequency block in a reasonable manner and is obligated to negotiate in good faith with such carriers regarding the establishment of new cellular services.
 - Cellular carriers may obtain only 10 MHz of PCS spectrum within the cellular market unless the integrated systems will compete with the landline monopoly.
 - RBOC- and LEC-affiliated cellular providers may obtain only 10 MHz of PCS spectrum within their affiliated RBOC or LEC landline franchise area.

CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Interest: Association representing cellular service providers.

Band Plan:

- Supports an allocation of four 20 MHz blocks and four 10 MHz blocks using a BTA-only service area scheme and opposes petitions advocating 30 and 40 MHz PCS licenses in light of the viable competitive opportunities presented by 10 MHz allocations. (10-13)

Service Areas:

- The FCC should permit PCS license partitioning and aggregation to increase spectral efficiencies. (16)

Cellular Eligibility:

- The FCC may raise the overlap threshold to 40 percent and increase the attribution standard to 30-35 percent as the record demonstrates that more relaxed cellular eligibility and attribution standards better promote the public interest. (3)
- MCI's proposed exclusionary rule should be rejected as it is an attempt to eliminate potential PCS rivals at the consumer's expense and is based on untenable conclusions. (3-10)
- The FCC should effect compliance with its eligibility and attribution rules by requiring any necessary divestitures only after the submission of successful bids. (14-15)
- The FCC should issue tax certificates to cellular operators who are required to or who elect to divest their cellular interest. (15)

Other:

- To ensure that PCS is available to the public with minimal delay, the FCC should refrain from imposing generic anti-trafficking restrictions. (16)

CITIZENS UTILITIES COMPANY

Interest: Local exchange carrier serving primarily small and rural communities.

Cellular Eligibility:

- Before making a decision on the applicability of cellular eligibility restrictions to rural telcos, the FCC must finalize the definition of "rural telco" for PCS licensing purposes, as parties cannot provide a meaningful response to petitioners' proposals without knowing what entities would fall within the category of "rural telco." (3-4)
- Reiterates its belief that a LEC should serve at least one small community (the FCC has proposed 2,500 but commenters generally support a threshold of 10,000 or less) that is within the MTA or BTA *and* serve no more than some specified percentage (i.e., 10 percent) of the total population within the MTA or BTA to qualify as a "rural telco." (4-5)
- Assuming that the FCC adopts an appropriate definition of "rural telco", rural telcos should be exempted from cellular eligibility restrictions. (5-6)

Power Limits:

- Agrees that higher powered systems are essential to achieve coverage in a cost-effective manner in less populated rural areas and urges the FCC to increase the maximum base station power limit to at least 1,000 watts ERP. (12-13)

Performance Requirements:

- The FCC should permit post-auction partitioning as long as the rules preserve policies to deploy PCS in rural areas and on a universal basis. For example, the FCC should consider permitting PCS licensees to partition service areas only if such partitioning occurs within a specified time after licensing and the FCC should not relax construction requirements at all if a licensee has the option to partition off portions of its service area that it is not serving. (11-12)

Other:

- To ensure that LECs have flexibility to use PCS spectrum for local loop service, the FCC should clarify what is meant by "fixed services" in rule 99.3 and what policy reason exists for restricting fixed service. (13-14)

GENERAL COMMUNICATION, INC.

Interest: Facilities based interexchange carrier in Alaska.

Band Plan:

- Opposes the petitions to reduce the size of spectrum block allocations and to reduce the licensed geographic areas -- the FCC's decision strikes a balance to accommodate diverse interests and allows aggregation of spectrum if that is the most valued use. (3-5)

Cellular Eligibility:

- The FCC's decision limiting cellular operators to a 10 MHz block license within their service area is reasonable and should not be reconsidered. (5-7)
- Rural telcos already have significant monopoly power within their service areas and should not be exempt from restrictions applicable to cellular license holders. (7-9)
- Believes the FCC should grant MCI's petition to exclude the largest nationwide cellular carriers from one of the 30 MHz MTA blocks. (9)
- Cellular carriers should not be granted a grace period in which to divest cellular assets and should not be granted tax certificates for divesting. (11-13)

Ownership Limits:

- Opposes GTE's proposal to multiply the percentage cellular ownership by the percentage cellular coverage and apply the restriction only if the product exceeds 20 percent. (11)
- Believes that the 20 percent standard previously adopted by the FCC strikes a reasonable balance between allowing participation and preventing domination and, therefore should not be increased significantly. If the FCC does modify the cellular ownership attribution standard, the FCC must apply the same standard for determining PCS license ownership. (10-11)

Power Limits:

- Supports an increase in the power limit to 1000 watts ERP to provide for more economical and widespread deployment of PCS, particularly in less populated areas, while reducing overall interference and average radiated power. (2-3)

Performance Requirements:

- The build-out requirements should not be modified. (13-14)
- Partitioning should not be permitted because it would result in a multiplicity of very small, possibly incompatible systems. Build-out requirements should apply to an entire MTA or BTA area if partitioning is allowed. (15-16)

GTE SERVICE CORPORATION

Interest: Manufacturer and local exchange and cellular service provider.

Cellular Eligibility:

- The eligibility restriction should be reconsidered, and at a minimum, the 20 percent effective POP test should be adopted. (2-4)
- The FCC should reject as self-serving and anticompetitive MCI's request to bar cellular carriers from one 30 MHz frequency block. (4-8)
- The FCC should clarify that compliance with eligibility restrictions must occur prior to initiation of PCS service and that tax certificates will be issued for any necessary divestiture of cellular interests. (8-9)

Band Plan/Service Areas:

- Supports allowing licensees to subdivide PCS spectrum either geographically or by frequency to expedite the introduction of new services, promote more diverse participation in PCS, and create incentives for the development of innovative niche offerings. (9-10)
- Supports Telocator proposal to utilize county listings for service areas rather than relying on constructs potentially implicating intellectual property rights. (13-14)

Power Limits: Petitioners overwhelmingly support allowing an increase in PCS base station power to ensure the ability to meet construction benchmarks. (11-12)

CAI Standards: Does not support the TIA request to mandate compliance with interim PCS technical standards since there is no guarantee that such standards would not delay the introduction of PCS. Instead, standards should be left to industry bodies. (12-13)

INTERDIGITAL COMMUNICATIONS CORPORATION

Interest: Major supplier of wireless communications systems for local loop operations in rural areas. (1)

Service Areas:

- Section 99.3 should allow BETRS-type wireless local loop applications so that PCS can be used to benefit rural areas through the use of lower cost loops to drive down the overall average cost of telephone service. BETRS is only used in rural areas where the loop distances are long or copper plant is impractical. The use of PCS spectrum to permit telephone companies (and competitors) to provide radio loops in place of copper supports the principle of universal service and in the long term will help provide competition for the wired loop monopoly. (3)

Other:

- Because of low population density, major PCS licensees will not provide service to rural areas. The FCC should allow the major PCS licensees to partition their license grants and sub-license an entity to develop rural systems. (5-6)

KSI INC.

Interest: Company with expertise in location technology and its application to Intelligent Vehicle-Highway Systems

Other:

- Direction Finding Location System developed by KSI presents the optimal solution to the need to develop E-911 capabilities for PCS without additional spectrum allocations. Other methods of location are under development. Although KSI does not object to the imposition of a requirement on PCS licensees to incorporate E-911 capability within their systems, FCC involvement in standard setting is unnecessary and could chill the development of possible alternatives. (1-2)